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SNS College of Technology, Coimbatore-35.

(Autonomous)

B.E/B.Tech - Internal Assessment - II

Academic Year 2023-2024 (Even)

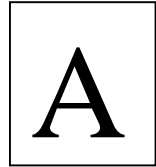
Second Semester

Common to CSE, IT & AIML

19EET103 – Electric Circuits and Electron Devices

Time: 1^{1/2} Hours

Maximum Marks: 50



Answer All Questions

PART - A (5 x 2 = 10 Marks)

	CO	Blooms
1. Distinguish between Power and Power factor in AC circuits.	CO2	UND
2. List the advantages of three phase circuits.	CO2	REM
3. Sketch the Wiring Layout of staircase wiring.	CO3	UND
4. Differentiate Neutral and grounding	CO3	UND
5. Define the concept of ELCB.	CO3	REM

PART – B (2 x 13 + 1x14= 40 Marks)

6. (a) Show with the right equations how inductive and capacitive elements work in AC circuits.	CO2	UND
(or)		
(b) Explain the following with relevant diagrams:: Waveform, Time Period, Peak value, R.M.S & average value	CO2	UND
7. (a) Summarize the general rules followed residential wiring and also list the materials used.	CO3	UND
(or)		
(b) Make use of Conduit wiring, show the layout of residential wiring.	CO3	APP
8. (a) Construct an Electronic Fuse block diagram and explain its working in detail.	CO3	APP
(or)		
(b) Identify the causes of electrical accidents, and how to prevent them practically.	CO3	APP

Abbreviations:- REM-Remembering, UND-Understanding, APP-Appling, ANA-Analyzing, EVA-Evaluating, CRE-Creating

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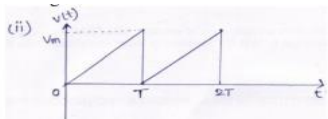
19EET103 – Electric Circuits and Electron Devices

B

Time: 1^{1/2} Hours

Maximum Marks: 50

Answer All Questions

PART - A (5 x 2 = 10 Marks)			
		CO	Blooms
1.	Define power factor? whether it should be high or low? why?	CO2	UND
2.	Compare real and reactive power.	CO2	UND
3.	List the advantages & disadvantages of Conduit wiring.	CO3	REM
4.	Name few causes of electrical accidents.	CO3	REM
5.	Show the difference between a fuse and a circuit breaker	CO3	UND
PART – B (2 x 13 = 26 Marks)			
6.	(a) A pure inductor is excited by a sinusoidally varying AC voltage, show that the average power consumed by inductor is zero.	CO2	UND
	(or)		
	(b) Find the Average and RMS value for the following waveform  also find the formfactor and peak factor	CO2	APP
7.	(a) With neat diagrams, explain various types of fuses used in electrical wiring systems.	CO3	UND
	(or)		
	(b) Summarize the safety precaution to avoid electrical accidents.	CO3	UND
PART – C (1 x 14 = 14 Marks)			
8.	(a) Illustrate the types of wiring in residential building and explain in detail.	CO3	UND
	(or)		
	(b) Explain in detail about types of electrical grounding with neat sketch.	CO3	UND

Abbreviations: Rem - Remembrance, Und-Understanding, App - Apply, Ana – Analyze, Eva - Evaluate, Cre – Create